

=> dis hist

```
(FILE 'USPAT' ENTERED AT 16:16:39 ON 17 JUL 1998)
L1      3197 S FLOW? AND CAVITY AND INJECTION AND MOLD? AND CHANNEL
L2      12 S MULTI-IMPRESSION AND TOOL?
L3      0 S L2 AND L1
L4      1 S L2 AND FLOW? AND CHANNEL?
L5      0 S L2 AND INLET AND PRODUCT AND FLOW? AND CHANNEL?
L6      0 S L2 AND PRODUCT AND FLOW? AND CHANNEL?
L7      0 S L2 AND INLET AND FLOW? AND CHANNEL?
L8      1 S L2 AND FLOW? AND CHANNEL?
L9      0 S L1 AND FAMILY(W) (TOOL? OR MOLD?)
L10     3463 S MATERIAL(P) INLET? AND CHANNEL? AND CAVITY AND FLOW
L11     3982 S MATERIAL(P) INLET? AND CHANNEL? AND CAVIT? AND FLOW
L12     1517 S L11 AND MOLD?
L13     305 S L12 AND TOOL?
L14     214 S L13 AND INJECT?
L15     125 S L14 AND SOLID?
L16     69 S PATH AND L15
L17     77 S SHORT SHOTS
L18     120 S OVERPACKING
L19     3 S L17 AND L18
L20     0 S L19 AND L16
L21     0 S L16 AND L17
L22     0 S L16 AND L18
L23     1 S L17 AND L14
L24     0 S L17 AND L15
L25     1 S L17 AND L13
L26     1 S L17 AND L12
L27     1 S L17 AND L11
L28     0 S L18 AND L11
L29     0 S L18 AND L12
L30     0 S L18 AND L13
L31     0 S L18 AND L14
```

=> s l1 and l18

```
L32      5 L1 AND L18
```

=> s l1 and l17

```
L33      4 L1 AND L17
```

=> dis l32 cit,fd 1-5

1. 5,762,855, Jun. 9, 1998, Method of using a sequential fill valve gated **injection molding** system; James E. Betters, et al., 264/328.8, 328.13; 425/145, 564, 566, 573 [IMAGE AVAILABLE]

US PAT NO: 5,762,855 [IMAGE AVAILABLE] L32: 1 of 5
DATE FILED: Apr. 29, 1996

2. 5,728,410, Mar. 17, 1998, System for **injection molding** of plastic article utilizing a variable volume spill **cavity**; James W. Hendry, 425/130, 533, 546 [IMAGE AVAILABLE]

US PAT NO: 5,728,410 [IMAGE AVAILABLE] L32: 2 of 5

DATE FILED: Oct. 22, 1996

3. 5,607,640, Mar. 4, 1997, Method for **injection molding** of plastic article; James W. Hendry, 264/572; 425/130 [IMAGE AVAILABLE]

US PAT NO: 5,607,640 [IMAGE AVAILABLE] L32: 3 of 5
DATE FILED: Jun. 21, 1995

4. 5,556,582, Sep. 17, 1996, **Injection molding gate flow** control; David O. Kazmer, 264/40.1, 328.12, 328.8; 425/145, 570, 573 [IMAGE AVAILABLE]

US PAT NO: 5,556,582 [IMAGE AVAILABLE] L32: 4 of 5
DATE FILED: Feb. 17, 1995

5. 3,982,440, Sep. 28, 1976, Method of determining **molded** part profile; Rodney J. Groleau, et al., 73/865.8; 264/40.1; 364/150; 702/81 [IMAGE AVAILABLE]

US PAT NO: 3,982,440 [IMAGE AVAILABLE] L32: 5 of 5
DATE FILED: Aug. 13, 1975

=> dis 133 cit,fd 1-4

1. 5,750,068, May 12, 1998, Gas-introduced **injection molding** and method of obtaining the same; Hirofumi Gouda, et al., 264/572; 425/130 [IMAGE AVAILABLE]

US PAT NO: 5,750,068 [IMAGE AVAILABLE] L33: 1 of 4
DATE FILED: Oct. 5, 1995

2. 5,514,447, May 7, 1996, Gas-introduced **injection molding** and method of obtaining the same; Mamoru Kimura, et al., 428/156, 120, 192, 212, 213 [IMAGE AVAILABLE]

US PAT NO: 5,514,447 [IMAGE AVAILABLE] L33: 2 of 4
DATE FILED: Apr. 25, 1994

3. 5,342,191, Aug. 30, 1994, Plastics **injection molding** device with multipositioning construction for gas assisted **molding**; Suresh D. Shah, et al., 425/533; 264/328.13, 328.3, 572; 425/535, 546 [IMAGE AVAILABLE]

US PAT NO: 5,342,191 [IMAGE AVAILABLE] L33: 3 of 4
DATE FILED: Oct. 2, 1992

4. 3,982,440, Sep. 28, 1976, Method of determining **molded** part profile; Rodney J. Groleau, et al., 73/865.8; 264/40.1; 364/150; 702/81 [IMAGE AVAILABLE]

US PAT NO: 3,982,440 [IMAGE AVAILABLE] L33: 4 of 4
DATE FILED: Aug. 13, 1975

> dis cit 119 1-3

1. 3,982,440, Sep. 28, 1976, Method of determining molded part profile; Rodney J. Groleau, et al., 73/865.8; 264/40.1; 364/150; 702/81 [IMAGE AVAILABLE]
2. 3,977,255, Aug. 31, 1976, Evaluating pressure profile of material flowing to mold cavity; Rodney J. Groleau, et al., 73/865.9; 364/475.05 [IMAGE AVAILABLE]
3. 3,840,312, Oct. 8, 1974, DYNAMIC PRESSURE CONTROL SYSTEM; Donald C. Paulson, et al., 425/149; 264/328.13; 364/183, 475.09; 425/139, 145

> dis cit

1. 5,342,191, Aug. 30, 1994, Plastics **injection molding** device with multipositioning construction for gas assisted **molding**; Suresh D. Shah, et al., 425/533; 264/328.13, 328.3, 572; 425/535, 546 [IMAGE